

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for validating a message with a signature, wherein said method comprises:

- receiving said message with said signature; and
- carrying out an integrated validation and storing process, wherein said signature is validated based on a validation algorithm and a key and said received message is stored in a database, and wherein said carrying out the integrated validation and storing process comprises storing said message and validating said signature within one atomic process; wherein said storing said message and validating said signature within one atomic process prevents possible modification of the message between validation and storage, and wherein said received message is locked before the integrated validation and storing process is carried out and released after the integrated validation and storing process has been finished.

2. (Cancelled)

3. (Original) The method according to claim 1, wherein the storing process is rolled back, if the signature is not valid.

4. (Original) The method according to claim 1, wherein the storing process is completed, if the signature is valid.

5. (Cancelled)

6. (Original) The method according to claim 1, wherein said received signature is locked before the integrated validation and storing process is carried out and released after the integrated validation and storing process has been finished.

7. (Original) The method according to claim 1, wherein the integrated validation and storing process is carried out by said database.

8. (Original) The method according to claim 7, wherein the integrated validation and storing process is controlled by said database.

9. (Original) The method according to claim 1, wherein said message is an XML-document.

10. (Original) The method according to claim 1, wherein said signature is a digital signature.

11. (Original) The method according to claim 1, wherein said integrated validation and storing process is carried out as an ACID transaction.

12. (Currently Amended) A method for generating a signature for a message, wherein said method comprises:

carrying out an integrated receiving and generating process, wherein said message to be sent is received and said signature is generated based on a signing algorithm and a key, wherein said carrying out the integrated receiving and generating process comprises receiving said message to be sent and generating said signature within one atomic process, ~~and~~ wherein said receiving said message and said generating said signature within one atomic process prevents possible modification of the message between said receiving and said generating, and wherein said message to be sent is locked before the integrated receiving and generating process is carried out and released after the integrated receiving and generating process has been finished; and

sending said message with said signature.

Claims 13 and 14. (Cancelled)

15. (Original) The method according to claim 12, wherein said key to be used for generating the signature is locked before the integrated receiving and generating process is carried out and released after the integrated receiving and generating process has been finished.

16. (Original) The method according to claim 12, wherein said message is an XML-document.

17. (Original) The method according to claim 12, wherein said integrated receiving and generating process is carried out as an ACID transaction.

18. (Original) The method according to claim 12, wherein said integrated receiving and generation process is carried out in a database, where said message to be sent is stored.

19. (Original) The method according to claim 12, wherein said signature is a digital signature.

Claims 20 and 21. (Cancelled)

22. (Currently Amended) An apparatus for validating a message with a signature, wherein said apparatus comprises:

a first means for receiving said message with said signature; and

a second means for carrying out an integrated validation and storing process, wherein said second means are capable and affected to validate said signature based on a validation algorithm and a key and to store said message, wherein said carrying out the integrated validation and storing process comprises storing said message and validating said signature within one atomic process, ~~and~~ wherein said storing said message and validating said signature within one atomic process prevents possible modification of the message between validation and storage, and wherein said received message is locked

before the integrated validation and storing process is carried out and released after the integrated validation and storing process has been finished.

23. (Currently Amended) An apparatus for generating a signature for a message, wherein said apparatus comprises:

means for carrying out an integrated receiving and generating process, wherein said means are capable and affected to receive said message to be sent and to generate said signature based on a signing algorithm and a key, wherein said carrying out the integrated receiving and generating process comprises receiving said message to be sent and generating said signature within one atomic process, ~~and~~ wherein said receiving said message and said generating said signature within one atomic process prevents possible modification of the message between said receiving and said generating, wherein said message to be sent is locked before the integrated receiving and generating process is carried out and released after the integrated receiving and generating process has been finished; and

means for sending said message with said signature.

24. (Currently Amended) A method for validating a message with a signature, wherein said method comprises:

receiving said message with said signature; and

carrying out an integrated validation and storing process, wherein said signature is validated based on a validation algorithm and a key and said received message is stored in a database, ~~and~~ wherein said integrated validation and storing process prevents possible modification of the message between validation and storage, and wherein said received message is locked before the integrated validation and storing process is carried out and released after the integrated validation and storing process has been finished.

25. (Previously Presented) The method according to claim 24, wherein the storing process is rolled back, if the signature is not valid.

26. (Cancelled)

27. (Previously Presented) The method according to claim 24, wherein said received signature is locked before the integrated validation and storing process is carried out and released after the integrated validation and storing process has been finished.

28. (Currently Amended) A method for generating a signature for a message, wherein said method comprises:

carrying out an integrated receiving and generating process, wherein said message to be sent is received and said signature is generated based on a signing algorithm and a key, ~~and~~ wherein said carrying out the integrated receiving and generating process prevents possible modification of the message between said receiving and said generating, and wherein said message to be sent is locked before the integrated receiving and generating process is carried out and released after the integrated receiving and generating process has been finished; and

sending said message with said signature.

29. (Cancelled)

30. (Previously Presented) The method according to claim 28, wherein said key to be used for generating the signature is locked before the integrated receiving and generating process is carried out and released after the integrated receiving and generating process has been finished.

31. (New) A method for validating a message with a signature, wherein said method comprises:

receiving said message with said signature; and

carrying out an integrated validation and storing process, wherein said signature is validated based on a validation algorithm and a key and said received message is stored in a database, and wherein said carrying out the integrated validation and storing process comprises storing said message and validating said signature within one atomic process;

wherein said storing said message and validating said signature within one atomic process prevents possible modification of the message between validation and storage, and wherein said received signature is locked before the integrated validation and storing process is carried out and released after the integrated validation and storing process has been finished.

32. (New) A method for generating a signature for a message, wherein said method comprises:

carrying out an integrated receiving and generating process, wherein said message to be sent is received and said signature is generated based on a signing algorithm and a key, wherein said carrying out the integrated receiving and generating process comprises receiving said message to be sent and generating said signature within one atomic process, wherein said receiving said message and said generating said signature within one atomic process prevents possible modification of the message between said receiving and said generating, and wherein said key to be used for generating the signature is locked before the integrated receiving and generating process is carried out and released after the integrated receiving and generating process has been finished; and
sending said message with said signature.

33. (New) An apparatus for validating a message with a signature, wherein said apparatus comprises:

a first means for receiving said message with said signature; and
a second means for carrying out an integrated validation and storing process, wherein said second means are capable and affected to validate said signature based on a validation algorithm and a key and to store said message, wherein said carrying out the integrated validation and storing process comprises storing said message and validating said signature within one atomic process, wherein said storing said message and validating said signature within one atomic process prevents possible modification of the message between validation and storage, and wherein said received signature is locked before the integrated validation and storing process is carried out and released after the integrated validation and storing process has been finished.

34. (New) An apparatus for generating a signature for a message, wherein said apparatus comprises:

means for carrying out an integrated receiving and generating process, wherein said means are capable and affected to receive said message to be sent and to generate said signature based on a signing algorithm and a key, wherein said carrying out the integrated receiving and generating process comprises receiving said message to be sent and generating said signature within one atomic process, wherein said receiving said message and said generating said signature within one atomic process prevents possible modification of the message between said receiving and said generating, wherein said key to be used for generating the signature is locked before the integrated receiving and generating process is carried out and released after the integrated receiving and generating process has been finished; and

means for sending said message with said signature.

35. (New) A method for validating a message with a signature, wherein said method comprises:

receiving said message with said signature; and

carrying out an integrated validation and storing process, wherein said signature is validated based on a validation algorithm and a key and said received message is stored in a database, wherein said integrated validation and storing process prevents possible modification of the message between validation and storage, and wherein said received signature is locked before the integrated validation and storing process is carried out and released after the integrated validation and storing process has been finished.

36. (New) A method for generating a signature for a message, wherein said method comprises:

carrying out an integrated receiving and generating process, wherein said message to be sent is received and said signature is generated based on a signing algorithm and a key, wherein said carrying out the integrated receiving and generating process prevents possible modification of the message between said receiving and said generating, and

wherein said key to be used for generating the signature is locked before the integrated receiving and generating process is carried out and released after the integrated receiving and generating process has been finished; and

 sending said message with said signature.